



5/28/2004

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application: Alan B. Shuey

Serial No. 10/085,543

: Title of Invention:  
**Cable Support Systems**

Confirmation No. 9808

Filed: February 28, 2002

Group Art Unit: 3632

Examiner: Korie H. Chan

Supervisory Patent Examiner: Les Braun

Assignee: Ductmate Industries, Inc.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail

No. EL 978301008 US

in an envelope addressed to:

Mail Stop ATTENDEMENT

Commissioner for Patents, P.O. Box 1450

Alexandria, VA 22313-1450

6/3/04 Paul McCarthy  
Date - Signature, Paul A. Beck & Associates

**DECLARATION  
OF  
James R. Moon 37 CFR 1.132**

May 28, 2004

I, Jim Moon, declare as follows:

1. I am employed by Ductmate Industries, Inc. the assignee of Application Serial No. 10/085,543
2. **EDUCATION**

(a) BS in Mechanical Engineering in 1982 from Grove City College.

**RECEIVED**

3. **EXPERIENCE**

JUN 10 2004

**GROUP 3600**

(a) Worked at United States Patent and Trademark Office as an Assistant Examiner for 2 years, 4 months.

- (b) Worked for Nitrochem LLC as Maintenance Supervisor and Project Engineer, responsible for the design, installation, and repair of piping, ductwork, and related support systems, for 10 years.
- (c) Worked at Ductmate Industries, Inc., Engineering Department helping with design of cable support systems for 1 year, 6 months.

4. **I HAVE REVIEWED:**

- (a) The Shuey Patent Application No 10/085,543;
- (b) US Patent No. 4,550,890 - Redman et al;
- (c) US Patent No. 3,069,738 – Nelson;
- (d) US Patent No. 4,6353,791 – Sword;
- (e) US Patent No. 4,656,698 – Arakawa;
- (f) US Patent No. 3,321,161 – Hirt; and
- (g) Examiners Office Communication (dated 03/11/04) in this Shuey Patent Application; and

5. **THE LEVEL OF SKILL OF ONE SKILLED IN THIS ART**

In my opinion, a person of ordinary skill in this art would be a person with a Mechanical Engineering Degree having two (2) years experience working with support systems.

6. **IN MY OPINION THE CLAIMED INVENTION IS NOT OBVIOUS**

- (a) There is no motivation to suggest to a person of ordinary skill in the art to combine Redman with Nelson or Sword and Arakawa to provide a cable system that can precisely control the height of an object suspended from an overhead structure. The structures and teachings of Redman, Nelson, Sword, and Arakawa do not lead a person of ordinary skill in the art to the claimed structure in Application Serial No. 10/085,543. The teachings and uses of Redman, Nelson, Sword and Arakawa are incompatible with each other. Selected parts of each of the prior art must be combined to lead to the claimed structure. However, the prior art does not teach the desirability of the combination or why it is desirable to use the selected parts necessary to make the claimed invention. The following supports my analysis of non-obviousness:
- i. Redman teaches using a strap having continuous edges that loops around a pipe where both ends of the strap support from the C clamp which is inconsistent with the support from one end of a cable;
  - ii. Redman does not suggest replacing the strap with a cable;
  - iii. Redman's exiting structure will not work with a cable and therefore, does not describe to a person of ordinary skill in the art how to use the invention with cables;
  - iv. Redman's straps are adjustable vertically which is inconsistent with Nelson's and Sword's cables which are not adjustable vertically;
  - v. Redman's invention holds an object stationary whereas Nelson and Sword cables are used to move an object;
  - vi. Nelson's invention is a tractor logging hook that uses cables to move logs;
  - vii. Nelson does not suggest replacing straps with a cable
  - viii. Nelson does not teach that it is desirable to use Nelson's cable in the place of the strap;

- ix. Nelson teaches support from one end of the cable which is inconsistent with Redman's support from both ends of the strap;
- x. Nelson's cable will not work with Redman's existing structure;
- xi. Nelson's cables are fixed in length and not adjustable vertically;
- xii. Sword's invention is a line coupling apparatus used in log-hauling systems to move logs;
- xiii. Sword does not suggest replacing straps with a cable;
- xiv. Sword does not teach that it is desirable to use Sword's cable in place of straps;
- xv. Sword teaches support from one end of the cable which is inconsistent with Redman's support from both ends of the strap;
- xvi. Sword's cable will not work with Redman's existing structure;
- xvii. Sword's cables are not adjustable vertically;
- xviii. Arakawa invention is an Arrangement for gripping end regions of elongated flexible elements;
- xix. Arakawa teaches supporting an object from two support surfaces whereas Sword, Nelson, and Redman all teach support from one support surface. An example of support of the type that Arakawa teaches is running a wire across a picture frame to hang the picture frame on the wall. Each end of the wire is connected to opposite sides of the frame. The wire then contacts a nail on the wall;
- xx. Arakawa does not suggest replacing straps with a cable;
- xxi. Arakawa does not teach that it is desirable to use Arkawa's cable in place of straps;
- xxii. Arakawa does not teach that it would be desirable to use its support structure in a C clamp;
- xxiii. Arakawa does not teach it that it would be desirable to use its support structure to replace support structure that supports two ends of a strap.

(b) There is no motivation to suggest to a person of ordinary skill in the art to combine Hirt with Nelson or Sword and Arakawa to provide a cable system that can precisely control the height of an object suspended from an overhead structure. The structures and teachings of Hirt, Nelson, Sword, and Arakawa do not lead a person of ordinary skill in the art to the claimed structure in Application Serial No. 10/085,543. The teachings and uses of Hirt, Nelson, Sword and Arakawa are incompatible with each other. Selected parts of each of the prior art must be combined to lead to the claimed structure. However, the prior art does not teach the desirability of the combination or why it is desirable to use the selected parts necessary to make the claimed invention.

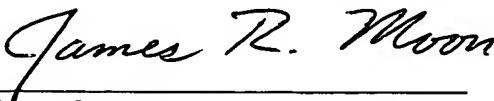
The following supports my analysis of non-obviousness:

- i. Hirt teaches using a solid rod with threads;
- ii. Hirt does not suggest replacing the rod with the a cable;
- iii. Hirt's structure will not work with a cable and therefore, does not describe to a person of ordinary skill in the art how to use the invention with cables;
- iv. Hirt's rods are adjustable vertically which is inconsistent with Nelson's and Sword's cables that are not adjustable vertically;
- v. Hirt's invention holds an object stationary whereas Nelson's and Sword's cables are used to move an object;
- vi. Nelson's invention is a tractor logging hook that uses cables to move logs;
- vii. Nelson does not suggest replacing a rod with a cable;
- viii. Nelson does not teach that it is desirable to use Nelson's cable in the place of a threaded rod;
- ix. Nelson's cable will not work with Hirt's existing structure;
- x. Nelson's cables are fixed in length and not adjustable vertically;
- xi. Sword's invention is a line coupling apparatus used in log-hauling systems to move logs;
- xii. Sword does not suggest replacing a rod with a cable;
- xiii. Sword does not teach that it is desirable to use Sword's cable in place of a rod;

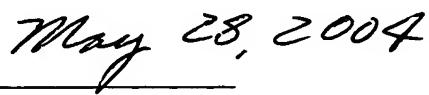
- xiv. Sword's cables are not adjustable vertically;
- xv. Sword's cables will not work with Hirt's existing structure;
- xvi. Arakawa invention is an Arrangement for gripping end regions of elongated flexible elements;
- xvii. Arakawa teaches supporting an object from two support surfaces whereas Sword, Nelson, and Hirt all teach support from one support surface. An example of support of the type that Arakawa teaches is running a wire across a picture frame to hang the picture frame on the wall. Each end of the wire is connected to opposite sides of the frame. The wire then contacts a nail on the wall;
- xviii. Arakawa does not suggest replacing a rod with a cable;
- xix. Arakawa does not teach that it is desirable to use Arkawa's cable in place of a rod;
- xx. Arakawa does not teach that it would be desirable to use its support structure in a C clamp or attach it to a C clamp;
- xxi. Arakawa does not teach that it would be desirable to use its support structure to replace support structure of rods.

#### DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
\_\_\_\_\_  
James R. Moon

Date:

  
\_\_\_\_\_  
May 28, 2004